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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/711,957	10/15/2004	Jason Sterly	81107942 / FMC 1808 PUS	5956
28395 7590 12/18/2006 BROOKS KUSHMAN P.C./FGTL 1000 TOWN CENTER 22ND FLOOR SOUTHFIELD, MI 48075-1238			EXAMINER ROSENBERG, LAURA B	
			ART UNIT	PAPER NUMBER
			3616	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/18/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/711,957

Applicant(s)

STERLY ET AL.

Examiner

Laura B. Rosenberg

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 October 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/15/04; 3/16/06</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Drawings

1. The drawings are objected to because the line connecting reference character "102" with the left concave side of the concave portion of the bushing is not pointing to the correct feature in figures 7 and 8. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The disclosure is objected to because of the following informalities: "bolts 70" should be changed to --bolts 68-- (par. 26, line 5). Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 19 and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In regards to claim 19, it is unclear if "a rib" is a different feature from "a first surface feature" set forth in claim 11, and if "a receptacle portion" is a different feature from "a second surface feature" set forth in claim 11. As best understood from the disclosure, the first surface feature on the outer surface of the bushing is the rib, and the second surface feature of the bracket that engages the first surface feature of the bushing is a receptacle portion. However, the rib and the receptacle portion are both presented in claim 19 as new features. If applicant intended for claim 19 to further define the first surface feature as a rib and the second surface feature as a receptacle portion, examiner recommends rephrasing claim 19 to read, "The combination of claim 11 wherein the first surface feature of the outer surface of the bushing is a rib, and the second surface feature of the bracket is a receptacle portion for receiving the rib."

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Claim 20 recites the limitation "the concave wall" in lines 1-2, and "the convex outer surface" in line 2. There is insufficient antecedent basis for these limitations in the claim.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-5, 7, 9-15, 17, and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by McHorse et al. (6,073,714). McHorse et al. disclose a stabilizer bar assembly (for example, including #84) able to be used with a vehicle having an axle assembly and a suspension system for supporting the vehicle on the axle assembly, the stabilizer bar assembly comprises:

- Stabilizer bar (including #84) having right and left ends (as can be seen in figure 3) that are operatively connected to the axle assembly at spaced locations (for example, via connection of stabilizer bar to left and right suspension assemblies)
- The stabilizer bar has at least one annular ring (for example, including #120) intermediate the ends
- First and second bushings (for example, including #124) each having an inner surface that contacts the stabilizer bar (best seen in figures 5-7)

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- The first bushing having a groove (for example, including #130) able to receive the annular ring and contacting opposite sides of the annular ring (column 5; best seen in figure 7)
- First and second brackets (for example, including #134) that each engage an outer surface of one of the bushings (best seen in figures 5-7) to secure the first and second bushings to the vehicle at spaced locations (for example, secured to cross member #110)
- The annular ring is a ring integrally formed on the stabilizer bar (the term integral being sufficiently broad to embrace constructions united by such means as fastening and welding)
- The annular ring is a separately formed ring that is secured onto the stabilizer bar in an assembly operation (for example, secured via screws #122)
- The stabilizer bar is a solid bar (solid cross section can be seen in figure 6)
- The first bushing has a cross-section that defines the groove to include first and second walls that extend outwardly from the inner surface of the bushing, the first and second walls engaging the opposite sides of the annular ring (can be seen in figure 7)
- Rib (for example, including #124a, 124d, 124e) is formed on an outer surface of the first and second bushings (best seen in figures 5, 7)
- The first and second brackets each have a receptacle portion (for example, including side walls #134c, 134d) for receiving one of the respective ribs

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- Lateral loads applied to the groove by the annular ring are resisted by the bushing and transferred through the bushing to one of the ribs and, in turn, to the bracket (column 5)

Examiner notes that while reference is made to bushing assembly #116 above, the bushing assembly on the opposite side of the stabilizer bar (#114) is a mirror of this bushing assembly. Further, in regards to claims 3 and 13, the method of forming the device is not germane to the issue of patentability and has not been given patentable weight.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 6 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kincaid et al. (5,954,353) in view of McHorse et al. (6,073,714). Kincaid et al. disclose a stabilizer bar assembly (for example, including #30) able to be used with a vehicle having an axle assembly and a suspension system for supporting the vehicle on the axle assembly, the stabilizer bar assembly comprises:

- Stabilizer bar (including #30) having right and left ends (as can be seen in figure 1) that are operatively connected to the axle assembly at spaced locations (for example, via connection of stabilizer bar to left and right suspension assemblies)

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- First and second mounting bracket assemblies (for example, including #36) each contacting the stabilizer bar and being attached to the vehicle at spaced locations (for example, attached to frame rails #14)
- The stabilizer bar is a hollow tubular member (column 3, lines 65-67)

Kincaid et al. do not disclose the specifics of the mounting bracket assemblies.

McHorse et al. teach a stabilizer bar assembly comprising mounting bracket assemblies (including #114, 116), the mounting bracket assemblies comprising bushings, brackets, annular ring, and various features of the bushing and brackets as set forth in paragraph 6 above. It would have been obvious to one skilled in the art at the time that the invention was made to modify the stabilizer bar assembly of Kincaid et al. such that it comprised bushings, brackets, annular ring, and other features as claimed in view of the teachings of McHorse et al. so as to confine the stabilizer bar against lateral movement relative to the mounting bracket assembly components, and so as to provide vibration isolation and damping benefits (McHorse et al.: column 5).

9. Claims 1, 8, 11, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hein (5,224,790) in view of Boor (2,078,367). Hein discloses a stabilizer bar assembly (for example, as seen in figures 1-3) able to be used with a vehicle having an axle assembly and a suspension system for supporting the vehicle on the axle assembly, the stabilizer bar assembly comprises:

- Stabilizer bar (including #10) having right and left ends (entire stabilizer bar not shown)

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- The stabilizer bar has at least one annular ring (for example, including #14) intermediate the ends
- Bushing (for example, including #9) having an inner surface that contacts the stabilizer bar (best seen in figures 1, 2)
- Bushing having a groove (for example, including ramped portions #36, 37) able to receive the annular ring and contacting opposite sides of the annular ring (best seen in figure 2)
- Bracket (for example, including #7, 8) that engages an outer surface of the bushing (best seen in figures 1, 2) to secure the bushing to the vehicle (for example, secured to frame #12)
- The bushing has a cross-section that defines the groove to include a curved concave wall that extends between two spaced portions of the inner surface of the bushing, the curved concave wall contacting opposite sides of the annular ring (best seen in figures 2, 3)
- The bushing having an outer surface having a first surface feature (for example, including annular depression #23)
- The bracket having a second surface feature (for example, including corresponding depression in bracket member #8; column 2, lines 49-51) that engages the first surface feature of the bushing and is able to resist lateral movement of the bushing relative to the bracket (column 2)

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- The annular ring has a convex outer surface (for example, formed by ramped portions #33, 34) that is engaged by the concave wall of the bushing (best seen in figures 2, 3)

Hein does not specifically disclose two spaced apart bushing and bracket assemblies. While it is old and well known in the art to use two spaced apart mounting assemblies when connecting a stabilizer bar to right and left sides of a vehicle, Boor teaches a stabilizer bar assembly (including #19) comprising a stabilizer bar (including #20) having right and left ends that are operatively connected to an axle assembly at spaced locations (as can be seen in figure 1), and two spaced apart bushing and bracket assemblies (one can be seen in figures 2, 3) connecting the stabilizer bar to left and right sides of the vehicle (for example, to side sills #13). It would have been obvious to one skilled in the art at the time that the invention was made to modify the stabilizer bar assembly of Hein such that it comprised two bushing and bracket assemblies as claimed in view of the teachings of Boor so as to connect the stabilizer bar to the vehicle while providing sufficient damping and insulating benefits to the assembly (Boor: as referred to throughout specification).

Allowable Subject Matter

10. None of the prior art of record appears to read on claim 20, as best understood by the examiner, and the subject matter of the claim appears to be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action. However, upon applicant's amendment to overcome the rejections

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and objections raised by the examiner and upon the examiner's better understanding of the invention, a comparison of the prior art to the claim will again be made.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kingsley discloses a bushing with concave and convex mating surfaces.

Anderson et al. disclose a hollow or solid stabilizer bar assembly.

Johansson et al. disclose a stabilizer bar assembly including a bearing with concave and convex mating surfaces and a bracket with a groove and locking ring.

Peterson discloses a stabilizer bar assembly including a bracket with bearings.

Fader et al. disclose a stabilizer bar assembly including two bands, two bushings, and two brackets.

Mihara et al. disclose a stabilizer bar assembly including a bushing with concave and convex mating surfaces.

Chaussepied discloses a stabilizer bar assembly including a bushing and bracket assembly with ribs and depressions.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura B. Rosenberg whose telephone number is (571) 272-6674. The examiner can normally be reached on Monday-Friday 7:00am-3:30pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on (571) 272-6669. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Laura B. Rosenberg
Laura B Rosenberg
Patent Examiner
Art Unit 3616

LBR

Paul N. Dickson 12/11/06
PAUL N. DICKSON
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600